



2022

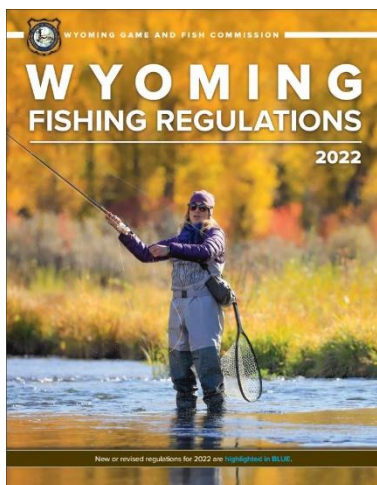
the wyoming game & fish department

# CASPER REGION

## angler newsletter

## Fishing Regulation Changes

### New Brochure for 2022



If you have not picked up a copy of the 2022 fishing regulation brochure, please do so before you get your line wet. You can grab hard copies of the 2022 regulations wherever you get your licenses or download and save an electronic copy to your phone by going to our website. While no new regulatory changes took effect in the Casper Region this year, there were some changes in other regions and some minor changes to statewide regulations. It is always a good idea to keep a copy of the current regulations for your reference.

[https://wgfd.wyo.gov/WGFD/media/content/Fishing/22WYFW\\_LR\\_2.pdf](https://wgfd.wyo.gov/WGFD/media/content/Fishing/22WYFW_LR_2.pdf)

## New Casper Region Aquatic Invasive Species Specialist

### Welcome Eric Hansen

In January of 2022, the Casper Region of the Wyoming Game and Fish Department welcomed Eric Hansen back as the regional Aquatic Invasive Species Specialist. Eric transplanted from the plains of Kansas to wonderful Wyoming at the age of five. He spent his childhood exploring the great outdoors and getting his hands and feet dirty wherever he could. Whether catching buckets full of sunfish at Cook Lake in the Black Hills of Wyoming or tracking the progress of the pollywogs that inhabited the mud puddles of the grasslands surrounding his hometown of Gillette, you could usually find him outside. To

## Inside this Angler Newsletter

### 2022 Casper Region

<i>New Face</i>	1
<i>AIS Update</i>	2
<i>Seminole</i>	3
<i>Pathfinder</i>	4
<i>Alcova</i>	5
<i>Miracle Mile</i>	7
<i>Cardwell</i>	7
<i>Robertson Road</i>	8
<i>Big Muddy</i>	10
<i>Glendo</i>	10
<i>33-Mile Ponds</i>	12
<i>Pete Creek</i>	12
<i>Blue Downey Res</i>	12
<i>Fish handling tips</i>	13
<i>The Crew</i>	16



this day, you can observe him elbows deep in the dirt of his garden or bending down, camera in hand, to get a closer look at something that catches his eye. Eric is not new to the Department or the AIS program. Eric first worked for the Department as an AIS technician at Glendo, then as the Casper Region AIS Specialist before transferring to the Green River Region AIS Specialist. He has enjoyed working in the great expanses of our wonderful state protecting our waterways from aquatic intruders and in the public teaching the importance of conserving our natural spaces for all future generations to enjoy. Eric is excited to return as the AIS Specialist for the Casper Region yet again, where he will be applying the knowledge and experience of his statewide travels, and helping to protect the many beautiful waters of the Region from the present threat of an AIS introduction.

## Aquatic Invasive Species Program Update

The AIS program in the Casper Region continued to work with the public and other agencies to help combat the spread of aquatic invasive species in our waterways in 2021. Watercraft Inspection Stations were operated at two permanent locations in the region (Torrington Port of Entry and Glendo Reservoir) and at other waters on a rotating basis (Seminole Reservoir, Pathfinder Reservoir, Alcova Reservoir and the North Platte River). Inspection stations were staffed from April 10th until Oct. 31st. A total of 10,617 inspections were conducted. Numbers of inspections continue to rise significantly in the region. Of those inspected, 190 were considered a high risk and 29 required decontamination before launching. Boats traveling from Lake Powell in Utah and Arizona continued to pose a great risk of transporting Zebra and Quagga mussels. Along with education and watercraft inspections, a priority of the AIS program is to monitor waters for introduced invasive species. Monitoring comes in different forms and includes plankton net tow sampling of lakes and reservoirs, water quality testing to assess risk parameters, and visual and tactile sampling of substrates, in creeks and rivers. Sites are chosen based off of risk and usage with monitoring locations expanding every season. If sus-



pected AIS are found, a sample is taken and shipped to a coordinating laboratory for positive identification. Once identified, more sampling is done in adjacent areas to formulate a greater understanding of distribution and threat. In the Casper Region there are established populations of Curly Pondweed, Brook Stickleback, Asian Clams, Rusty Crayfish, and New Zealand Mud Snail. Curly Pondweed is well established in the North Platte River at the Miracle Mile access point. It has since moved downstream and gained a footing in Pathfinder Reservoir as far north as Wolf Point. To date, no Curly Pondweed has been discovered below Pathfinder Dam. Brook Stickleback were introduced illegally as bait fish and have since spread throughout the North Platte River drainage. Asian Clams were discovered in Guernsey Reservoir in 2017 and have since spread below the dam to the Nebraska state line. Another invasive invertebrate is the Rusty Crayfish, which was introduced illegally into Wagonhound Creek in 2006 and so far has not spread downstream. In 2018, New Zealand Mud Snails were discovered in three locations of the North Platte River, including: the Cardwell Access Area,





downstream of Alcova dam, and at Gray Reef Access Area. In 2021, populations of New Zealand Mud Snails were observed as far down river as the Dan Speas Fish Hatchery. Their establishment solely at high usage areas, despite monitoring throughout the river, makes it extremely likely that New Zealand Mud Snails were transported by an unclean drift boat or on waders by anglers traveling from infested waters. Monitoring will continue to be conducted along North Platte River access points this season and at tributaries to the river. The threat of aquatic invasive species in Wyoming is an ever-evolving issue, which requires diligence not only from our state agencies but also from the public as a whole. It is paramount that everyone who uses our wonderful state's resources be an advocate for preserving and protecting our waters for future generations' use and enjoyment. It is everyone's duty to remain steadfast in procedures for moving from one body of water to another. CLEAN all equipment after every use. DRAIN any standing water from any and all water holding compartments, and allow to thoroughly DRY before using again. Performing these three simple tasks will help ensure that the wealth of enjoyment we all get from Wyoming's waters will continue for many generations to come.

## Regional Fisheries Updates



### Seminole Reservoir

Situated at the farthest extent of the Casper Fisheries Region, Seminole Reservoir is scenically located along the southern edge of its namesake mountain range. Given that water levels in Seminole Reservoir dropped by over 53 feet in 2021, anglers can continue to expect a whole new environment of shoreline scenery, potential boating hazards, and fishing spots this upcoming year. Unfortunately, annual spring monitoring showed that the trout population in Seminole remained below objective for the fourth consecutive year in 2021 despite consistently stocking over 120,000 large Rainbow Trout annually. The persistence of older age-classes of fish should, however, continue to provide anglers with the opportunity to catch larger trout; though they may be a little harder to find. To that point, Rainbow Trout sampled during the spring netting in 2021 averaged nearly 17 inches and 2.1 pounds, with the largest Rainbow measuring 20.9 inches and 3.4 pounds. In light of the ailing Rainbow Trout population, and as a result of how well they fared in Alcova Reservoir, approximately 30,000 Bear River Cutthroat Trout were stocked in Seminole Reservoir beginning last year. If this species performs as well in Seminole as it has in Alcova, a change in management strategies and stocking request in favor of Bear River Cutthroat may be in order; although it will likely take a few years before patterns can be fully evaluated.



In contrast with the fairly bleak results of the spring trout sampling, annually collected netting data found that the Seminole Walleye population recently climbed to the highest measured level of the past decade. Based on the number and age groups that were present in the 2021 sample, the thriving Walleye population is the result of four years of abnormally high spawning success. Accordingly, the average length of Walleye sampled in 2021 remained fairly low at just over 13 inches. Despite this, sampling did find a modest increase in the number of Walleye over 15.0 inches, which will benefit anglers this upcoming year. Furthermore, recent increases in the number of fish between 20 and 25 inches as well as the catch of multiple fish over 29.5 inches (weighing over 11 pounds) suggests that Seminole Reservoir is still one of the best places in the Casper Region to catch the Walleye of a lifetime.



## Pathfinder Reservoir

The saga to provide a good trout fishery at Pathfinder Reservoir continues to prove challenging. The annual spring trout netting in late-May 2021 produced extremely low catch rates of Rainbow Trout and Snake River Cutthroat Trout. The combined catch of these two species in 2021 was among the lowest since before 2010, with only 67 individuals captured. Though few in number, the 37 Rainbow Trout averaged 17.8 inches and 2.5 lbs. The largest Rainbow Trout sampled was 23.0 inches and 4.5 lbs. Thirty Snake River Cutthroat were captured, averaging 18.7 inches and 2.7 lbs. The largest of the Cutthroat measured 21.0 inches and weighed 3.9 lbs. Finally, 18 Brown Trout were captured, averaging 17.7 inches and 2.1 lbs., with the largest Brown Trout measuring 25.1 inches and weighing 5.8 lbs. A recent addition to the Pathfinder trout fishery is the stocking of 50,000 Bear River Cutthroat Trout, which began in 2021. We plan to continue stocking 50,000 per year after seeing great growth and survival of this species in many other waters, including Alcova Reservoir. Finally, eleven Kokanee were captured in 2021 netting. These were mostly larger adults that ranged from 14.8–18.0 inches and weighed between 1.4 and 2.4 lbs. The sampled Kokanee were all in excellent plump condition, and are demonstrating exceptional growth rates. Additionally, spawning Kokanee have been evident in the Miracle Mile starting in September the last two years, indicating that some degree of natural spawning is occurring.



The annual fall netting was conducted in September to monitor trends in the Walleye population. A total of 258 Walleye were captured, representing one of the highest Walleye catch rates ever in Pathfinder Reservoir. The Walleye catch was dominated by fish between 11–13 inches, suggesting large year classes of younger fish. Overall, Walleye averaged 13.5 inches and 1.0 lbs. The largest Walleye captured was 32.1 inches and 12.5 lbs. Many Walleye anglers indicated very high catch rates of smaller (11–13 inch) fish in 2021, which aligns with the netting results. Walleye in Pathfinder have become abundant enough that growth rates have slowed. With the number of small Walleye increasing, we are encouraging anglers to harvest some of these small fish. Harvesting some of the excess small fish frees up resources to allow the remaining fish the opportunity to grow to the size most desired by anglers.



## Alcova Reservoir

Easily one of the most popular recreation destinations in the Casper area, Alcova Reservoir is just 30 minutes from town and remains poised to provide excellent fishing opportunities for a variety of species. Although large crowds of recreational boaters – particularly in the summer – have kept Alcova from regularly receiving the same fishing pressure as other nearby locations, anglers can practically have the reservoir to themselves by fishing during the colder months of the year and during the twilight hours of spring and summer; a time of day when fish are most apt to bite anyway. Routine monitoring of this reservoir in 2021 generally found robust sportfish populations that are likely to satisfy anglers in 2022. Trout sampling occurred in late-May and the results were fairly consistent with that





of the past few years; relative abundance of all trout remained above objective due to strong Bear River Cutthroat numbers and steady (albeit poor) survival of Rainbow Trout. What was new and exciting about last year, however, were our findings of a 275% increase in the presence of Bear River Cutthroat in angler harvest surveys since 2020. The long delay between stocking and showing up in shore angler catch supports the idea that Cutthroat stocked in Alcova seemingly avoid Walleye predation by living in open water while young before moving into shallow shoreline habitat once they become fairly large and less vulnerable. This would also at least partially explain why the average length of shore-angler-harvested Cutthroat measured 17.8 inches; a full inch greater than that of harvested Rainbows. Moreover, Bear River Cutthroat in Alcova are continuing to display longer lifespans than Rainbow Trout and have increased their ultimate size potential each year since having been stocked. For example, the largest Bear River Cutthroat sampled in 2021 measured an impressive 22.9 inches and 5.1 pounds! And while Rainbow Trout numbers have been fairly low in Alcova since 2018, these fish still accounted for over half of all angler harvest in 2021 and were found reaching sizes over 19.5 inches and 2.6 pounds.



Fishing for Kokanee Salmon in Alcova Reservoir has not only increased in popularity over the past few years, but we are beginning to see quite a dedicated following. That having been said, capturing the number of Kokanee needed to draw meaningful conclusions about the health of the population has proven unpredictable during our routine monitoring efforts. As such, the local Fisheries Biologists recently added a new gear type and sampling locations to the arsenal by employing mid-water curtain nets to specifically target Kokanee during the early summer. And while the sampling kinks have yet to be fully ironed out, the inaugural sampling in 2021 found the average size Kokanee to be 15.6 inches, with the largest fish sampled measuring 19.6 inches and 2.6 pounds.

Sampled using sinking nets in the fall, the average catch rate for Alcova Walleye in 2021 was the highest observed in over a decade. Detailed netting data shows that the population is thriving largely due the combination of abundant age-1 fish (9.0–11.5 inches) and generally high survival rates. Although the number of Walleye in Alcova continues to be above the management objective, the population has become exceptionally well balanced (in terms of size groupings) over the past few years. Unfortunately, the number of anglers pursuing them is fairly low. Anglers that do target Walleye at Alcova will most likely enjoy the quality of their fish given that the average has climbed to 15.5 inches and 1.8 pounds, with the largest fish sampled in 2021 having measured 29.5 inches and 10.3 pounds!



## North Platte River – Miracle Mile

The Miracle Mile trout fishery is a secret to no one these days. Population estimates had typically been done on even-numbered years; however, the complications related to the COVID-19 pandemic ultimately caused the 2020 sampling to be moved to 2021. In late-July, we completed a population estimate with raft electrofishing along about three miles of the Miracle Mile reach, approximately 1.5 miles upstream and downstream of the bridge. We captured a total of 1,357 trout (829 Rainbow, 512 Brown, 16 Snake River Cutthroat). Rainbow Trout ranged from 4.8–24.4 inches and averaged 15.6 inches. Brown Trout ranged from 4.9–28.4 inches and averaged 9.0 inches, and Snake River Cutthroat ranged from 16.5–21.4 inches and averaged 19.0 inches. Our estimates suggest there are about 1,600 Rainbow Trout and 1,800 Brown Trout per mile. Due to differences in size structure, the biomass is dominated by Rainbow Trout, with their estimate being over 2,800 lbs. per mile compared to 580 lbs. of Brown Trout biomass per mile. The population estimate is overall similar to the previous one completed in 2018, but down from the long-term high in 2016, when the Rainbow Trout estimate was over 3,000 fish per mile. Despite the decrease in the population from 2016, the 2021 estimate is the highest biomass estimate since at least 2008, indicating that the Rainbow Trout fishery is comprised of more, larger individuals than any time in the recent past. The Brown Trout population is supported by natural spawning, whereas the Rainbow Trout population is augmented with 100,000 stocked fish in early fall each year. Anglers should expect continued excellent fishing at this popular fishery for years to come.



## North Platte River – Fremont Canyon

This Public Access Area on the North Platte River can be found just downstream of Pathfinder Dam and has consistently been one of the most popular fisheries in the Casper Region. Known for growing an abundance of large trout, anglers continue to travel from all over the state and the country just to enjoy this blue-ribbon tailwater. Visiting anglers may have noticed the recent addition of extensive rock barriers placed along sections of the main access road, which were added in early-2021 after less obtrusive efforts (i.e., signs and fencing) were unsuccessful at curbing angler trespass, camping, and off-road vehicle use. Although typically evaluated every fall, sampling of the meadow site did not occur in the autumn of 2019 or 2020 after necessary dam maintenance at both Pathfinder and Alcova caused water levels to remain prohibitively high. With flows returning to normal in fall 2021, the Casper Fisheries Management Crew was able to spend a day in mid-October sampling this reach to monitor the abundance, quality, and condition of the trout population. What we found is a welcomed increase in the number, biomass,



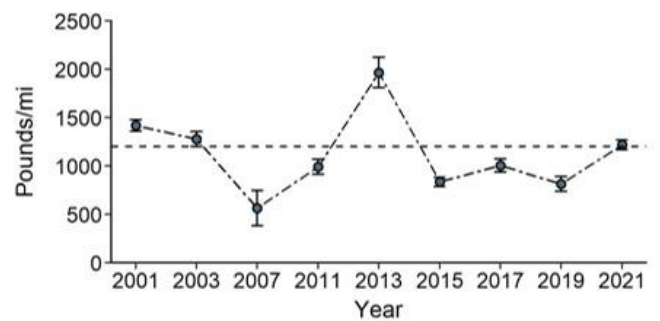
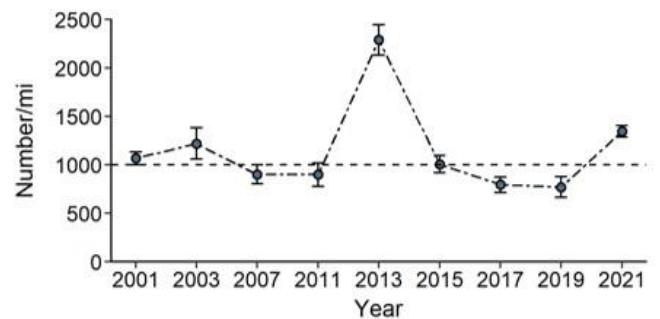


and size structure of trout that was spurred by excellent spawning success over the past two years. Most notably, the overall trout population increased to roughly 930 fish per mile with a total biomass of over 1,550 pounds of fish per mile. Rainbow Trout, which comprised 78% of the trout population, averaged 15.5 inches and 1.7 pounds; the largest measuring 22.5 inches and 3.9 pounds. The remaining 22% of the population was almost solely accounted for by Brown Trout, some of which were over 20 inches long. And while they do not make up a large part of the population, a small number of Snake River Cutthroat Trout – averaging 15.6 inches long – were also captured in the fall of 2021, which most likely originated from Pathfinder Reservoir where they are annually stocked.



## North Platte River – Robertson Road through Morad Park

With distant places like Gray Reef and the Miracle Mile garnering most of the local trout fishing prestige, many people don't realize that there is still excellent trout water running right through the City of Casper. To keep tabs on this (sub)urban fishery, the trout population in the North Platte River between Robertson Road Bridge and the lower end of Morad Park is monitored every two years; a schedule that allows Fisheries Biologists to sample a greater number of sites throughout the whole of the river each year. And while the local trout population had been in a state of decline as of late, monitoring last fall revealed a much-welcomed increase in both trout abundance and biomass. In October of 2021, mark-recapture sampling downstream of Robertson Road yielded a population estimate of 1,344 trout per mile weighing a cumulative 1,216 pounds of trout per mile. Not only is this a substantial increase over the 2019 estimates, but for the first time since 2014 we have exceeded our management objectives for this particular stretch of river (see adjacent graphs). Similar to previous evaluations, Rainbow Trout comprised



over 96% of the overall trout population in 2021 while Brown Trout accounted for just 3% of all sampled fish. Furthermore, these principal trout species were generally found reaching an average lengths of around 14 inches, with the largest individuals from each species being a 22.1 inch Rainbow and a 25.1 inch Brown. What was new, however, was the uptick in the number of Bear River and



Snake River cutthroat trout sampled downstream of Gray Reef Dam; some of which were nearly 18 inches long. That said, these strains of cutthroat have been repeatedly stocked in Alcova Reservoir and it is not a surprise that some would have made it into the lower river when the reservoir was drained by 42 feet in the fall of 2020.

If you recall from past newsletters, the cause of the previous multi-year dip in the population abundance was mainly attributed to circumstances resulting from high variability in both the timing and the amount of water releases from Gray Reef Dam between 2015 and 2019. During these years, the river regularly experienced extended periods with extremely high or low water levels after the spring flush (when the vast majority of trout spawn in the river) that were often interrupted by sudden changes in discharge before trout eggs had time to mature, hatch, and emerge by mid-June. These types of irregular discharge patterns result in redds either becoming stranded or suffocated when water levels decreased and blown-out when water levels increased. Under ideal circumstances, the spring flushing flows – which prepare spawning gravel by clearing away sediment and organic plant debris that accumulates throughout the low flows of fall and winter – are followed immediately by an increase in discharge that is consistently held through much of June. The stability afforded by this scenario generally makes a large area available for spawning and allows enough time for the majority of fry to hatch from their eggs, become independent of the spawning redds, and to seek suitable refuge habitat before being subjected to extreme flow changes.

Much to our benefit, the steady and high flow regime we experienced in the spring and summer of 2020 was one which has a proven track record of spawning success that leads to an increase in age-1 fish by the following October. In support of this, it is noteworthy that the increased trout spawning success of 2020 was actually first documented as a 198% increase in our young-of-year trout catch in August 2020 and further confirmed as a 116% increase in age-1 fish during the October 2021 monitoring; these fish will be noticed throughout 2022 as an abundance of 14–18 inch fish. Unfortunately, it is highly unlikely that there will be a strong 2021 cohort of trout in the tailwater sections below Gray Reef Dam given that the flushing flow had to be cancelled last year to accommodate dam maintenance while also preventing Glendo Reservoir from entering flood stage.





## North Platte River – Big Muddy

The Big Muddy section of the North Platte River is located at the Cole Creek Road Bridge (County Rd. 22) and is the farthest downstream portion of river for which the trout population is routinely monitored. In October 2021, the biennial population estimate sampling resulted in a population estimate of 567 fish per mile and 738 pounds of fish per mile. This represents an increase of 40% in trout abundance and 18% in trout biomass over the past two years. Furthermore, sampling conducted in 2021 marks the first time the population estimate surpassed both management objectives since 2013. Similar to that observed upstream, the recent increase in abundance and biomass at Big Muddy is the result of a 152% uptick in the number of age-1 Rainbow Trout – which comprise nearly 98% of the overall population – since 2019. Consequently, the average length of Rainbow Trout has decreased to 14.4 inches and 1.2 pounds, although the population still includes fish upwards of 23.4 inches. And while this section of river has been regularly stocked with fin-clipped Rainbows – consisting solely of the Eagle Lake strain – annual sampling has repeatedly failed to detect more than 1% of the population being comprised of hatchery-origin fish. Accordingly, anglers may soon begin to notice an increase in the presence of Bear River Cutthroat Trout, given that the stocking request for the lower river has been changed in favor of this tolerant and hardy species.



## Glendo Reservoir

Just in case anyone hasn't heard yet, the Walleye fishing at Glendo Reservoir has been red hot for the past few years! The annual trend netting took place in August 2021, and Walleye catch rates were as high as they've been in at least the last 10 years. The Walleye catch was dominated by fish between 15–16 inches, but good numbers of fish between 12–14 inches were also represented. Overall, the average Walleye measured 15.0 inches and weighed 1.2 lbs., and the largest Walleye captured was 27.1 inches and 5.9 lbs. Gizzard Shad continue to overwinter in the reservoir and provide high-quality forage for sportfish. Glendo continues to provide one of the most robust Walleye fisheries in the state. Make time to get there this year!

For years, the panfish fishery in Glendo paled in comparison to the booming Walleye opportunity. The blip in that pattern has been the 2015 year class of Crappie (White and Black) that has survived and continued to grow larger each year. This continued into 2021, as





the average size of Crappie captured in the standard netting was 11.4 inches for Black Crappie and 12.0 inches for White Crappie. Many anglers caught Crappie larger than 13 inches in 2021, and Glendo Crappie continue to be one of the most commonly captured Master Angler entries. Unfortunately, these fish are becoming less common in our netting as they age out of the population and are not being replaced through natural recruitment. White Crappie were stocked into Glendo in 2019 and 2020 to try to establish another year class. Hopefully we will see these fish in sampling gear and angler creels in the years to come.

The final major component to the sport fishery in Glendo Reservoir is the Channel Catfish population. We captured Channel Catfish up to 26.7 inches and 5.7 lbs. during the reservoir netting in 2021. Additionally, we captured 155 Channel Catfish in the river between Orin and Glendo with electrofishing in 2021. These fish ranged from 10 to 33 inches, with the majority measuring between 16–23 inches.



A spring evening spent along the upper reservoir or river with a stout fishing rod and some cut bait should make for a good time.

Many Glendo-area anglers have probably noticed or heard of Sauger being caught in recent years. The North Platte River Sauger reintroduction began in 2017. Through 2021, a total of over 700,000 Sauger fry and fingerlings have been stocked near Dave Johnston Power Plant. The final planned stocking of Sauger will occur in spring 2022. It seems that the vast majority of these fish made their way downstream to Glendo Reservoir and the river downstream of Orin Weir. The Casper Fisheries Management Crew has begun deploying radio tags in adult Sauger to determine if they can migrate upstream past Orin Weir. At the same time, biologists will be radio tagging Channel Catfish, Quillback, and Shorthead Redhorse to examine seasonal movements of these species and evaluate their ability to pass a gauging station weir near the Orin Bridge. Anglers who capture a radio tagged fish will notice a wire antenna protruding from the fish's abdomen, as well as a yellow tag near the dorsal fin (circled in red in photo). The yellow tag includes the phone number for the WGFD Casper Regional Office, as well as a unique three-digit fish ID number. If an angler releases a tagged fish, reporting the three-digit tag number is the only way for biologists to determine which fish was captured. There are no rewards for reporting tagged fish, but anglers who choose to harvest tagged fish are encouraged to return the radio transmitter to the Game and Fish so the tag may be redeployed in another fish.



Radio tagged North Platte River Sauger with floy tag circled in red.



## 33-Mile Ponds

The area known locally as the “33-mile country” is a large expanse of arid land located north-northwest of Casper where the Bucknum Road splits; becoming the Thirty-three Mile Road (Rd. 110) and the Long Canyon Road (Rd. 114). Although mainly devoid of natural bodies of water, many small reservoirs have been created over the years on public BLM property for livestock production, a handful of which have been found to grow nice fish when environmental conditions allow. Typically stocked on an annual basis, either with trout or warm water species, fish populations in about a dozen little reservoirs had been reliably doing well over the past few years and had gained traction with local anglers. Unfortunately, pernicious drought conditions that took hold in 2020 have continued to take a dramatic toll on the persistence and quality of many of these remote fisheries. Most notably, surveys conducted in the spring of 2021 found that some of these small reservoirs had either completely dried up (e.g., Buffalo Bones) or had such low water levels that they had become mostly fishless and unable to be stocked (e.g., Muddy, Bypass, and Greasewood reservoirs). Fortunately, three of the 33-Mile reservoirs (i.e., Camel Hump, Sheepherders, and Saltbush) still had adequate water levels to support populations of fish as of early-2021. Despite the bleak state of things, water levels in these small reservoirs can change for the better with just one big, well-placed, rain storm and conditions will be monitored again in each reservoir as of spring 2022 to evaluate if and where stocking can continue.

## Pete Creek

Pete Creek is a small perennial stream that originates from the northern slope of the Ferris Mountains roughly 65 miles west of Casper (via Highway 220) along Carbon County Road 499. Publicly-accessible portions of this creek upstream (south) of private land underwent extensive habitat improvements in the early-1990s that helped to develop the size and quality of the local Brook Trout population. Nowadays, the section of Pete Creek flowing through the sage-covered foothills is dominated by a healthy number of beaver ponds and boasts a Brook Trout population of over 6,745 fish per mile! Given that this population estimate represents a 452% increase in the abundance of Brook Trout since it was last sampled in the fall of 2013, it would seem safe to say that the decades-old habitat improvements of Pete Creek are continuing to show their worth. And while the majority of the sampled fish were quite small – averaging just 5 inches in length – multiple Brook Trout were captured in Pete Creek that measured over 10 inches and would make for an exciting catch on ultra-light tackle.



## Blue Downey Park Reservoir

Blue Downey Park Reservoir is a 1-acre pond located on State land about 35 miles south of I-25 via the Fetterman Road (42.444034 - 105.687905 for those who are GPS savvy). This small water provided quality trout fishing for several decades before the aging pond and dam required renovation in recent years. The dam was rebuilt in 2019–2020, and 500 Rainbow Trout were restocked in 2020 and





2021 in addition to wild Brook Trout that enter the pond from the creek upstream. Stocking will continue in the coming years, and we are hopeful that the fishery will return to providing quality fishing with easy access for all ages and abilities.

## Help Us Improve Catch and Release Practices

There is no question that catch and release angling has become more prevalent amongst the fishing community in recent years. This shift away from consumptive harvest is particularly widespread amongst tournament anglers and fly fishermen. And while catch and release angling can be a great conservation strategy – especially in heavily pressured waters or areas with low fish populations – the act of releasing a fish does not necessarily ensure that it will live... or that it will live well. In most cases, the ability of a fish to survive and thrive after having been released will come down to just a few basic decisions anglers make before, during, and after landing a fish. More specifically, the focus for anglers interested in proper catch and release practices should be on when and where you are fishing, what kind of tackle you are using, as well as how you will land, handle, document, and release your prized catch. Below are some tips from the Casper Fisheries Crew to consider next time you hit the water for some catch-and-release fishing!

### *Stay cool*

- Avoid trout fishing in locations, times of year, or times of day with high water temperatures. Namely, when water temperatures are 70°F or above, it may be best to consider traveling to higher elevations with colder water, harvesting what you catch, or getting an early jump on the day to fish during the morning hours when water temperatures are lowest. Alternatively, when the water is warm, it is a good time to check out some of the warm-water species available in the region, such as Bass, Catfish, or panfish species, which are not as sensitive to warmer water temperatures.

### *Choose the right tackle*

- Use circle hooks, or barbless hooks. These types of hooks have been found to reduce immediate damage to fish and can help increase survival by making hook removal easier and faster with less fish handling. If you're a fan of using lures, consider cutting extra points from treble hooks or switching to single point barbless hooks. Also, hook removal is made much faster and less damaging when tools such as forceps or pliers are used. Lastly, for fish caught deep in the throat or gills, it is best to clip the line as close to the hook as possible rather than to trying to remove the hook itself.
- Use fishing line or tippet material that is heavy enough to fight your fish quickly to minimize exhaustion. While it is necessary in some locations to use ultra-light tackle, most waters in the Casper Region are turbid enough to allow for larger diameter fishing line or tippet. Quicker fights will not only minimize the chance of injury, but it will help conserve a fish's energy reserves needed for swimming, foraging, and predator avoidance.



***Handle with care***

- Avoid items, locations, or conditions that may abrade or remove the slime coating from fish. It is this protective layer of slime that insulates all fish from many of the parasites, bacteria, and fungi that are naturally found in water. As such, anything that disrupts this slime coating creates vulnerability to subsequent infection or infestation. The most common culprits for removing protective slime from fish are dry hands, net bags with knots, gloves, boat decking material, and rocks or sand.

- Do not land your fish by dragging them onto the shoreline or boat decking. Though landing a fish without a net or even a designated netter can be difficult, backing away from the water and “beaching” your catch is extremely injurious to the mouth, skin, and slime coating and will decrease the likelihood of survival and well-being after they swim off.

- Invest in a net with a knotless or rubber mesh net bag. These types of nets are widely available and in most cases the bags themselves are available that can be retrofitted on to your current net. Because of the lack of abrasive knots and the addition of smooth coatings, these types of nets will go a long way in preserving the health and condition of your catch.

- If you need to handle the fish, take a second to remove your gloves and get your hands wet. Though some fish can be unhooked and released directly from the net, some require a bit more attention and handling before they swim off. When this is the case, remember that dry hands and fabric will quickly peel away the protective slime coating that fish need to stay healthy. If you are fishing during the colder months, you may consider planning ahead to bring a towel to dry your hands off after the release and a set of hand warmers to warm up those fingers.

- Hold the fish horizontal with a gentle grip on the tail and body. Few things are more damaging to the mouths and gills of larger fish than to suspend it vertically by the jaw or operculum. Even when held flat to the water, minimize risk of damage by keeping fingers out of the fish’s mouth and gills. When holding a fish, use a thumb and index finger to encircle the caudal area in front of the tail while cradling the pectoral area (fins nearest the head) with the other hand; squeezing too hard with this hand can cause damage to the heart or liver.

- Allow fish to revive and recover before release. Gently hold the fish you plan on releasing in the net with the head pointed upstream in clean flowing water or fully submerged over the side of the boat until the fish can swim off under its own power. Though it is a common practice, pulling the fish back and forth in the water does not speed recovery; rather it can injure the gills and decrease their efficiency to extract fresh oxygen from the water.





### *Make Memories... not montages*

- Not every fish needs a full photo shoot; there, the secrets out. Believe it or not, in the not-so-distant past, it was the act of having spent the day fishing – regardless of social media notoriety – that served as its own reward. So yes, a picture may be worth a thousand words, and some fish are too big or too nice-looking to pass up a photo opportunity, but there are certainly a great many fish that are caught that could be released quickly and without being excessively handled or held out of water for the sake of another picture.
- Keep the fish in the water as much as possible, even while taking pictures. This is especially important if your fish has been over-exerted, mishandled, or fought in warmer water; all of which can decrease a fish's probability of survival after release. The best course of action to document your trophy is to keep the fish submerged in water while you (or a friend) set up the focus and lighting on your camera, then lift the fish only long enough to snap a few quick photos while returning the fish back to the water every few seconds. Not only will this add dramatic flair to your picture with water actively falling off the fish, but it will help keep the gills wet and enable your fish to breathe.
- Be creative with your photo compositions. Instead of the conventional “grip-and-grin” style photo, consider leaving your fish mostly submerged and use natural lighting and dynamic composition to capture that trophy while putting the welfare of the fish first.



## Casper Fisheries Staff



**Matt Hahn**  
Fisheries Supervisor



**Nick Hogberg**  
Fisheries Biologist



**Jeff Glaid**  
Fisheries Biologist



**Eric Hansen**  
Aquatic Invasive Species Specialist



**John McCoy**  
Aquatic Habitat Biologist

## Wyoming Game and Fish Department

3030 Energy Lane  
Casper, Wyoming 82604

Phone: 307-473-3400  
Fax: 307-473-3433

WE'RE ON THE WEB!  
[HTTP://WGFD.WYO.GOV/](http://WGFD.WYO.GOV/)

YOU CAN ALSO FIND US ON:

